

Claims

1. A device for structuring a functional polymer, comprising at least one continuously moving web carrying a coated substrate, at least one laser and at least one mask situated between said laser and said substrate, laser, mask and substrate being disposed such that said coated substrate is bombarded by said laser through said mask such that the layer on said substrate is removed locally therefrom in conformity with the configuration of said mask.
2. A device as defined in claim 1, wherein said laser emits in the ultraviolet spectral region.
3. A device as defined in any one of the previous claims, wherein said laser is an excimer laser.
4. A device as defined in any one of the previous claims, including a suction device.
5. A process for structuring functional polymers by means of at least one laser ablation step, wherein, in a continuous working process, the image of a mask is projected by at least one laser pulse onto a continuous substrate coated with at least one functional polymer such that said functional polymer is locally removed in conformity with the configuration of said mask.
6. A process as defined in claim 5, wherein said continuous working process is a roller-to-roller process.
7. A process as defined in claim 5 or claim 6, wherein said laser ablation is effected by a single laser pulse.
8. A process as defined in any one of the previous claims 5 to 7, wherein the projected image of said mask is reduced by a factor of 5.
9. A method of using a device as defined in any one of claims 1 to 4 and/or of using a process as defined in any one of claims 5 to 8 for laser structuring electrodes, for

structuring semiconductor and/or insulator layers, for making through-connections (via holes) of organic transistors and/or for the production of conducting paths, contact pads, resistors, electrodes, semi-conducting layers, insulator layers for electronic and/or electrical components, for condensers, organic diode structures, or organic photovoltaic structures